

## CLAIMS

1. A method of creating a federation of appliances, comprising the steps of:

5 placing an introduction device in close proximity to a first appliance;

establishing a secure communications channel between the introduction device and the first appliance;

10 transferring security information of the federation between the introduction device and the first appliance;

placing the introduction device in close proximity to a second appliance;

establishing a secure communications channel between the introduction device and the second appliance; and

15 transferring the security information from the introduction device to the second appliance, wherein the first and second appliance are thereafter members of the federation.

20 2. The method of claim 1, further comprising the step of:

after placing the introduction device in close proximity to the first appliance, the introduction device collecting a first device key from the first appliance.

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3. The method of claim 2, wherein the introduction device uses the first device key to communicate with the first appliance.

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4. The method of claim 1, wherein the security information comprises a group key.

5. The method of claim 4, further comprising the  
steps of:

providing a new group key to the first appliance, the  
new group key overwriting the previously stored group key,  
5 thereby removing the first appliance from the federation.

6. The method of claim 1, wherein the placing of the  
introduction device in close proximity to the first and  
second appliances comprises placing the introduction device  
10 in direct contact with the first and second appliances.

7. The method of claim 1, wherein the establishing of  
a secure communications channel between the introduction  
device and the first and second appliances comprises using  
15 cryptographic techniques.

8. The method of claim 7, wherein the security  
information comprises cryptographic keys and access control  
information.  
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9. A method of adding an appliance to a federation of  
appliances, comprising the steps of:

placing an introduction device in close proximity to  
the appliance;

25 establishing a secure communications channel between  
the appliance and the introduction device; and

transferring security information of the federation  
from the introduction device to the appliance, wherein the  
appliance is thereafter a member of the federation.

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10. The method of claim 9, further comprising the  
step of:

after establishing the secure communications channel,  
the introduction device collecting a device key from the  
5 appliance.

11. The method of claim 10, wherein the introduction  
device uses the device key to communicate with the  
appliance.

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12. The method of claim 9, wherein the placing of the  
introduction device in close proximity to the appliance  
comprises placing the introduction device in direct contact  
with the appliance.

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13. The method of claim 9, wherein the establishing  
of a secure communications channel between the introduction  
device and the appliance comprises using cryptographic  
techniques.

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14. The method of claim 9, wherein the security  
information comprises a group key.

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15. The method of claim 9, wherein the security  
information comprises cryptographic keys and access control  
information.

16. An introduction device for assigning an appliance to a federation of appliances in a secure manner, comprising:

- a proximity based communications port that permits
- 5 secure transfer of information between an appliance and the introduction device when the communications port is placed in close proximity to an appliance communications port;
- a processor connected to the proximity based communications port; and
- 10 a memory connected to the processor for storing security information the processor communicates with the appliance such that the processor reads the security information from the memory and transmits the security information to the appliance via the proximity based communications port.
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17. The introduction device of claim 16, further comprising a switch connected to the processor for signaling the processor to communicate with the appliance.

20 18. The introduction device of claim 17, wherein the switch is integral with the proximity based communications port.

25 19. The introduction device of claim 16, further comprising a communications interface connected to the processor for transmitting to and receiving data from other appliances in the federation of appliances.

30 20. The introduction device of claim 16, wherein the introduction device comprises one of a mobile telephone, a personal digital assistant and a wand.

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21. The introduction device of claim 16, wherein the  
security information transmitted to the appliance comprises  
access control information, cryptographic keys, or a group  
5 key.

22. The introduction device of claim 16, wherein the  
proximity based communications port comprises a mirror  
image of the appliance communications port such that the  
10 proximity based communications port mates with appliance  
communications port when placed in contact therewith.

23. A smart appliance that is capable of  
communicating with other smart appliances, comprising:

15 a proximity based communications port that permits  
secure transfer of information between the smart appliance  
and an introduction device when the communications port is  
placed in close proximity to a proximity based  
communications port of the introduction device;

20 a processor connected to the proximity based  
communications port; and

a memory connected to the processor for storing  
security information, wherein the processor communicates  
with the introduction device such that the processor reads  
25 the security information from the memory and transmits the  
security information to the introduction device via the  
proximity based communications port.

24. The smart appliance of claim 23, further  
30 comprising a communications interface connected to the  
processor for allowing the smart appliance to communicate  
with other smart appliances.

25. The smart appliance of claim 23 further comprising a switch connected to the processor for signaling the processor to communicate with the  
5 introduction device.

26. The smart appliance of claim 25 wherein the switch is implemented in software.

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